

Amendments to the Drawings:

The attached formal drawing sheet(s) include new Figure 2A. In Figure 2A, a plurality of evaporators and a pump coupled to a plurality of evaporators are shown.

REMARKS

Applicant respectfully requests reconsideration of this application in view of the following remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in substantially the same order in which the corresponding issues were raised in the Office Action.

Status of the Claims

Claims 1-11, 14-20, and 22-24 are pending. No claims are currently amended. No claims are canceled. No claims are added. No new matter has been added.

Summary of the Office Action

The drawings stand objected to.

Claims 1-11, 14-20, and 22-24 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

Claims 1, 2, 4-7, 20, and 22-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,510,052 to Ishikawa et al. (hereinafter "Ishikawa") in view of U.S. Patent No. 5,255,109 to Klein (hereinafter "Klein").

Claims 9, 10, 14-17, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Klein, and further in view of U.S. Patent No. 6,657,121 to Garner (hereinafter "Garner").

Claims 3 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Klein, and further in view of U.S. Patent Application No. 2004/0095721 to Ellsworth, Jr. et al. (hereinafter "Ellsworth").

Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Klein, and further in view of U.S. Patent No. 6,181,555 to Haley et al. (hereinafter "Haley").

Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Klein, and further in view of U.S. Patent No. 4,688,147 to Ono (hereinafter "Ono").

Response to Objections

The drawings stand objected to because the drawings must show every feature of the claims. In particular, the Office Action states that the drawings must show the “plurality of evaporators” and a “pump coupled to a plurality of evaporators.” Applicant respectfully submits that new Figure 2A shows the identified limitations, as suggested by the Examiner. Applicant appreciates the Examiner’s recommendation and respectfully requests that the objection to the drawings be withdrawn.

Response to Rejections under 35 U.S.C. § 112, first paragraph

Claims 1-11, 14-20, and 22-24 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. In particular, the Office Action states that the claim(s) contain subject matter which was not described in the specification.

Applicant respectfully disagrees with the Office Actions analysis regarding the claimed subject matter. Preliminarily, though, the Office Action appears to characterize the limitations of the claims in regard to a physical configuration and narrow scope, generally. However, Applicant respectfully submits that the scope of the claims is established by the language of each claim, and not by the Office Action’s purported interpretation.

The claimed subject matter is supported by the specification because the originally filed specification (including the claims) described embodiments to illustrate current claim language. Although the Office Action tries to limit heat removal from the display circuitry to forced convection, Applicant respectfully submits that the description of forced convection is merely one embodiment of heat removal, and it is not exclusive of other types of heat removal. For example, the specification also explains that the display 240 allows for natural convection. Detailed Description, para. 0016. Another described embodiment uses a remote heat exchanger 230, which is part of the cooling system with the evaporator 210 of Figure 2. Detailed Description, para. 0018; Fig. 2. Thus, the specification describes several non-exclusive embodiments. Given that several non-exclusive embodiments are described, the specification does provide an adequate written description of the limitations of the claims.

Moreover, Applicant respectfully asserts that the identified claim limitation is supported by the specification because the specification describes an embodiment having “a plurality of evaporators.” Although the scope of the claims is established by the language of each claim, and not by the language of the specification, Applicant directs the Examiner’s attention to page 6, paragraph 0013, for an exemplary embodiment which includes a plurality of evaporators. Given that the language of the claims is supported by the description provided in the specification, Applicant respectfully submits that claims 1-11, 14,-20, and 22-24 comply with the written description requirement of 35 U.S.C. § 112, first paragraph. Accordingly, Applicant respectfully requests that the rejection of claims 1-11, 14,-20, and 22-24 under 35 U.S.C. § 112, first paragraph, be withdrawn.

Response to Rejections under 35 U.S.C. § 103(a)

The Office Action rejected claims 1-11, 14-20, and 22-24 under 35 U.S.C. § 103(a) as being unpatentable over various combinations of Ishikawa and Klein, Garner, Ellsworth, Haley, and Ono. Applicant respectfully requests withdrawal of these rejections because the combination of cited references fails to teach or suggest all of the limitations of the claims.

CLAIMS 1-8

Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Klein. Applicant respectfully submits that claim 1 is patentable over the combination of cited references because the combination does not teach or suggest all of the limitations of the claim. Claim 1 recites:

A notebook computer system, comprising:

 a first heat sink to passively dissipate heat from the notebook computer system;

 a sensor system to monitor a temperature of a plurality of notebook computer system components, wherein the components comprise a display circuitry and a central processing system (CPU);

 a second heat sink coupled to the first heat sink, wherein the second heat sink is enabled if the notebook computer system detects at least one of the components of the notebook computer system exceeds a predefined temperature threshold; and

a plurality of evaporators coupled to the components to remove heat from the components.

(Emphasis added).

In order to establish a *prima facie* case of obviousness, the Office Action must show how the cited references disclose every limitation of the claim. Here, the Office Action does not assert that Ishikawa and Klein disclose all of the limitations of claim 1: Specifically, the Office Action correctly recognizes that Ishikawa does not teach or suggest a plurality of evaporators. Office Action, April 13, 2006, p. 4. The Office Action further fails to assert whether or not Klein teaches or suggests a plurality of evaporators. Given that the Office Action does not provide any assertion as to how the cited references might teach or suggest a plurality of evaporators, the Office Action fails to establish a *prima facie* case of obviousness.

Moreover, Klein does not disclose or otherwise teach a plurality of evaporators. Although the Office Action does not directly address this lack of teaching by Klein, the Office Action implies that Klein fails to teach or suggest a plurality of evaporators because the rejection of claim 9 combines Garner with Ishikawa and Klein in order to purportedly teach a plurality of evaporators. Office Action, April 13, 2006, p. 8. Otherwise, if Klein were to teach a plurality of evaporators, then Garner would presumably not be required as an additional reference to support the rejection of claim 9.

In contrast, claim 1 recites “a plurality of evaporators coupled to the components to remove heat from the components.” For the reasons stated above, Ishikawa and Klein, either alone or in combination, fail to teach or suggest all of the limitations of the claim. In particular, the cited references do not teach or suggest a plurality of evaporators coupled to the components to remove heat from the components. Furthermore, the Office Action does not provide a proper motivation to combine the references. Given that the cited references fail to teach or suggest all of the limitations of the claim, Applicant respectfully submits that claim 1 is patentable over the cited references. Accordingly, Applicant requests that the rejection of claim 1 under 35 U.S.C. § 103(a) be withdrawn.

Given that claims 2-8 depend from independent claim 1, which is patentable over the cited references, Applicant respectfully submits that dependent claims 2-8 are also patentable over the cited references. Accordingly, Applicant requests that the rejection of claims 2-8 under 35 U.S.C. § 103(a) be withdrawn.

CLAIMS 9-11 AND 14

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa in view of Klein, and further in view of Garner. Applicant respectfully submits that claim 9 is patentable over the combination of cited references because the combination does not teach or suggest all of the limitations of the claim. Claim 9 recites:

A method, comprising:
dissipating heat from a notebook computer system through a display of a notebook computer system;
monitoring a temperature of the notebook computer system components, wherein the components comprise a display circuitry and a central processing system (CPU); and
dissipating heat from the notebook computer system by using a **plurality of evaporators** coupled to the components to remove heat from the components, wherein the heat is transported via a working fluid, a pump coupled to the evaporators to transport the working fluid to a heat exchanger, and a fan to remove heat from the heat exchanger if the notebook computer system detects at least one of the components of the notebook computer system exceeds a predefined temperature threshold.
(Emphasis added).

In support of the rejection, the Office Action states, in part, “Garner teaches a providing a **plurality of evaporating plates (70)** to remove heat from a plurality of computer components (15) in a closed-loop system. See Figs. 2 and 3 and col. 5, lines 48-51.” Office Action, April 13, 2006, p. 8 (emphasis added).

Applicant respectfully disagrees with the Office Action’s characterization of the prior art because the cited combination of prior art fails to teach or suggest all of the limitations of the claim. In particular, Ishikawa, Klein, and Garner, either alone or in combination, do not teach or suggest a plurality of evaporators.

Ishikawa and Klein fail to teach or suggest a plurality of evaporators, as discussed above. Garner also fails to teach or suggest a plurality of evaporators. Garner merely teaches a thermal management system with a single evaporator plate (70). The figure cited by the Office Action clearly illustrates a single evaporator plate (70) between a processor 15 and a loop thermosyphon (42). Garner, Fig. 3. Figure 4 also illustrates a single evaporator plate (70). Garner, Fig. 4. Although Garner refers to evaporator plates in the plural (col. 5, line 48), the Office Action fails to explain how this general discussion of evaporator plates purportedly teaches or suggests a system having a plurality of evaporators. On the contrary, this reference to evaporator plates merely

serves as a discussion of how an evaporator plate is disposed within the thermal management system. Furthermore, even if Garner were to describe a system with multiple evaporator plates, the Office Action fails to explain how a single stack of evaporator plates might teach multiple evaporators. At most, Garner impliedly describes a single evaporator with multiple evaporator plates in a stack, although Garner does not explicitly teach or suggest this configuration. Therefore, Garner does not teach or suggest a plurality of evaporators.

In contrast, claim 9 recites “a plurality of evaporators.” For the reasons stated above, Ishikawa, Klein, and Garner, either alone or in combination, fail to teach or suggest all of the limitations of the claim. In particular, the cited references do not teach or suggest a plurality of evaporators. Furthermore, the Office Action does not provide a proper motivation to combine the references. Given that the cited references fail to teach or suggest all of the limitations of the claim, Applicant respectfully submits that claim 9 is patentable over the cited references. Accordingly, Applicant requests that the rejection of claim 9 under 35 U.S.C. § 103(a) be withdrawn.

Given that claims 10, 11, and 14 depend from independent claim 9, which is patentable over the cited references, Applicant respectfully submits that dependent claims 10, 11, and 14 are also patentable over the cited references. Accordingly, Applicant requests that the rejection of claims 10, 11, and 14 under 35 U.S.C. § 103(a) be withdrawn.

CLAIMS 15-20 and 22-24

Each of independent claims 15 and 20 includes a limitation which is similar to the limitations of claim 1 and 9. Given that the cited references fail to disclose at least the described limitations, Applicant respectfully submits that independent claims 15 and 20 are each patentable over the cited reference. Furthermore, each of independent claims 15 and 20 may be patentable over the cited reference for additional reasons. Accordingly, Applicant requests that the rejections of claims 15 and 20 under 35 U.S.C. § 103(a) be withdrawn. Additionally, Applicant respectfully requests that the rejection of dependent claims 16-19 and 22-24 under 35 U.S.C. § 103(a) also be withdrawn for depending from allowable independent claims 15 and 20.

CONCLUSION

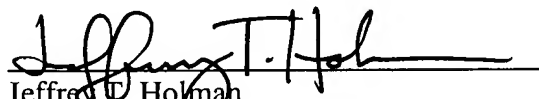
It is respectfully submitted that in view of the remarks set forth herein, the rejections and objections have been overcome. If the Examiner believes a telephone interview would expedite the prosecution of this application, the Examiner is invited to contact Jeffrey Holman at (408) 720-8300.

If there are any additional charges, please charge them to Deposit Account No. 02-2666.

Respectfully submitted,

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